WHAT IS CLAIMED IS

1. An imaging optical system for imaging a one-dimensional image on an image surface by regarding as an object a light modulator element which has light modulator parts arranged one-dimensionally in a first direction, and regarding a bundle of rays from the light modulator element as an object light, comprising:

at least two anamorphic surfaces each having radii of curvature which are different on an object surface in the first direction and a second direction which is perpendicular to the first direction, so that imaging surfaces in the first and second directions match.

2. The imaging optical system as claimed in claim 1, wherein at least one of said at least two anamorphic surfaces has a bent axis toroidal surface with a non-arcuate shape within a cross section cut along the first direction, and a curvature center line

of the bent axis toroidal surface formed by joining centers of curvature of cross sections cut along the second direction is a curve.

3. The imaging optical system as claimed in claim 1, wherein at least one of said at least two anamorphic surfaces has a first non-arcuate shape within a cross section cut along the first direction, and a second non-arcuate shape within a cross section cut along the second direction, and said second non-arcuate shape is variable depending on a coordinate of thereof in the first direction.

4. The imaging optical system as claimed in claim 1, wherein an imaging magnification Mv in the first direction and an imaging magnification Mh in the second direction satisfy a relationship $|Mv/Mh| > 1$.

5. The imaging optical system as claimed in claim 4, wherein a principal point in the first direction is set at a position closer to the light modulator element than that of a principal point in the second direction, through the entire imaging optical system.

6. The imaging optical system as claimed in claim 1, which is approximately telecentric in the first direction on a side closer to the light modulator element.

7. The imaging optical system as claimed in claim 1, comprising:

a stopper arranged closer to the imaging surface than the light modulator element.

8. The imaging optical system as claimed in claim 1, comprising:

an imaging system formed by a plurality of lenses,

wherein at least two of the plurality of lenses have different focal distances in the first and second directions, focal distances which differ in the first and second directions for the entire imaging optical system, and different imaging magnifications on the image surface.

9. The imaging optical system as claimed in claim 8, wherein at least one of the plurality of lenses arranged closer to the imaging surface than the light modulator element has a power Piv in the first direction and a power Pih in the second direction which satisfy a relationship $Piv < Pih$, and at least one of the plurality of lenses arranged closer to the light modulator element than the imaging surface has a power Pov in the first direction and a power Poh in the second direction which satisfy a relationship $Pov > Poh$.

10. An image display apparatus comprising:

a light modulator element which has light modulator parts arranged one-dimensionally in a first direction;

an imaging optical system to image a one-dimensional image on an image surface by regarding said light modulator element as an object and regarding a bundle of rays from the light modulator element as an object light, said imaging optical system including at least two anamorphic surfaces each having radii of curvature which are different on an object surface in the first direction and a second direction which is perpendicular to the first direction, so that imaging surfaces in the first and second directions match; and

a display section to display an image on a display surface by imaging the one-dimensional image on the display surface via said imaging optical system and relatively scanning the one-dimensional image and the display surface in a direction perpendicular to a longitudinal direction of the one-dimensional image.

11. The image display apparatus as claimed in claim 10, wherein said light modulator element

comprises:

a first modulator element having light modulator parts with spectral characteristics for red (R) color and arranged one-dimensionally in the first direction;

a second modulator element having light modulator parts with spectral characteristics for green (G) color and arranged one-dimensionally in the first direction; and

a third modulator element having light modulator parts with spectral characteristics for blue (B) color and arranged one-dimensionally in the first direction,

said first, second and third modulator elements being arranged parallel to each other so that each of the first, second and third modulator elements is adjacent to at least one of the first, second and third modulator elements.

12. The image display apparatus as claimed in claim 11, wherein said display section overlaps the red (R), green (G) and blue (B) colors with a timing difference to perform a color composite on the same pixel imaging position when relatively scanning the one-

dimensional image and the display surface.

13. The image display apparatus as claimed in claim 10, wherein said display section comprises:

a deflecting section to deflect an imaged bundle of rays obtained via said imaging optical system, so as to scan the one-dimensional image with respect to the display surface which is planar; and

a curvature of field correcting optical system, disposed between the deflecting section and the display surface, to substantially match an image surface of the imaged bundle of rays deflected and scanned by the deflecting section to the display surface.

14. An imaging optical apparatus comprising:

a light modulator element comprising a first modulator element having light modulator parts with spectral characteristics for red (R) color and arranged one-dimensionally in a first direction, a second

modulator element having light modulator parts with spectral characteristics for green (G) color and arranged one-dimensionally in the first direction, and a third modulator element having light modulator parts with spectral characteristics for blue (B) color and arranged one-dimensionally in the first direction, said first, second and third modulator elements being arranged parallel to each other so that each of the first, second and third modulator elements is adjacent to at least one of the first, second and third modulator elements; and

an imaging optical system to image lights from the first, second and third modulator elements of said light modulator element one-dimensionally on a common display surface,

a length of an imaging optical path for at least one of the colors being different from those of imaging optical paths for the other two colors, so as to correct differences in magnifications in a direction corresponding to the first direction caused by color aberration.

15. The imaging optical apparatus as claimed in claim 14, wherein a physical distance of at least one of the first, second and third modulator elements from said imaging optical system along an optical axis of said imaging optical system is different from those of the other two modulator elements.

16. The imaging optical apparatus as claimed in claim 14, wherein:

the modulator parts of each of the first, second and third modulator elements are arranged on the same plane so that physical distances of the first, second and third modulator elements from said imaging optical system along an optical axis of said imaging optical system are approximately the same, and

said imaging optical apparatus comprising:

a first transparent plate disposed adjacent to and parallel to the first modulator element;

a second transparent plate disposed adjacent to and parallel to the second modulator element; and

a third transparent plate disposed adjacent to and parallel to the third modulator element,

one of the first, second and third transparent plates having a thickness different from those of the other two transparent plates, so as to mutually correct lengths of imaging optical paths respectively through the first, second and third transparent plates.

17. The imaging optical apparatus as claimed in claim 14, wherein lengths of imaging optical paths with respect to the second and third modulator elements are approximately the same, and a length of an imaging optical path with respect to the first modulator element is longer than the lengths of the imaging optical paths with respect to the second and third modulator elements.

18. The imaging optical apparatus as claimed in claim 14, wherein the second modulator element is disposed adjacent to an optical axis of said imaging optical system, and the first and third modulator elements are disposed to sandwich the second modulator

element in a second direction perpendicular to the first direction.

19. An image display apparatus comprising:

a light modulator element comprising a first modulator element having light modulator parts with spectral characteristics for red (R) color and arranged one-dimensionally in a first direction, a second modulator element having light modulator parts with spectral characteristics for green (G) color and arranged one-dimensionally in the first direction, and a third modulator element having light modulator parts with spectral characteristics for blue (B) color and arranged one-dimensionally in the first direction, said first, second and third modulator elements being arranged parallel to each other so that each of the first, second and third modulator elements is adjacent to at least one of the first, second and third modulator elements;

an imaging optical system to image lights from the first, second and third modulator elements of said light modulator element one-dimensionally on an image surface;

and

a display section to display an image on a display surface by imaging the one-dimensional image on the display surface via said imaging optical system and relatively scanning the one-dimensional image and the display surface in a direction perpendicular to a longitudinal direction of the one-dimensional image,

a length of an imaging optical path for at least one of the colors being different from those of imaging optical paths of the other two colors, so as to correct differences in magnifications in a direction corresponding to the first direction caused by color aberration.